

Monitoring Data Record

Project Title: Cashiers (R-2224A) COE Action ID: 200230408

Stream Name: unnamed tributary to the Thorpe Reservoir DWQ Number: 000536
City, County and other Location Information: Sta. 136+00LT on NC 107 N of Cashiers

Date Construction Completed: December 2003 Monitoring Year: (3) of 5
Ecoregion: _____ 8 digit HUC unit 06010203
USGS Quad Name and Coordinates: _____

Rosgen Classification: _____

Length of Project: 948' Urban or Rural: Urban Watershed Size: _____

Monitoring DATA collected by: M. Green Date: 10/18/06

Applicant Information:

Name: NCDOT Roadside Environmental Unit

Address: 1425 Rock Quarry Rd. Raleigh, NC 27610

Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us

Consultant Information:

Name: _____

Address: _____

Telephone Number: _____ Email address: _____

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level 1 ~~2~~ ~~3~~

Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: NCDOT shall perform the following components of Level I monitoring twice each year for the 5 year monitoring period (summer and winter): Reference photos, plant survival, and visual inspection of channel stability. If less than two bankfull events occur during the first 5 years, NCDOT shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the 5 year monitoring period, the USACE, in consultation with resource agencies, may determine that further monitoring is not required.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Attach site map showing the location and angle of all reference photos with a site designation (name, number, letter, etc.) assigned to each reference photo location. Photos should be provided for all structures and cross section locations, should show both banks and include an upstream and downstream view. Photos taken to document physical stability should be taken in winter. Photos taken to document vegetation should be taken in summer (at representative locations). Attach photos and a description of each reference photo or location. We recommend the use of a photo identification board in each photo to identify location.

Total number of reference photo locations at this site: 4 reference points, 2 photos at each

Dates reference photos have been taken at this site: 12/30/04, 1/05/05, 5/31/05, 10/18/06

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: _____

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Some replanting should take place in 2007 due to the buffer area being mowed and the minimal woody vegetation along the streambanks.

Estimated causes, and proposed/required remedial action:_____

ADDITIONAL COMMENTS: Woody vegetation is minimal along the streambank and in the buffer area but did include dogwood, rhododendron, tulip poplar, northern red oak, white pine, red maple, green ash, birch, and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

This stream relocation is stabilized except for a few bank failures below the driveway culvert that were noted during the Summer 2005 evaluation of the site. Funding has now been set up to get the bank failures repaired, upgrade the culvert, and replant the site. NCDOT hopes to do this work in the near future.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

Cashiers Stream



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6

Year 3 – October 2006

Cashiers Stream



Photo 7



Photo 8

Year 3 – October 2006

